

GreenCO BMPs for the Conservation and Protection of Water Resources

Xeriscape

Description

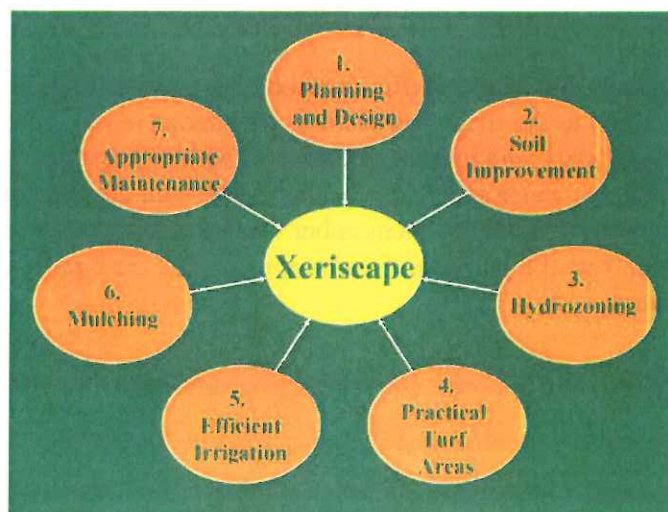
Implement the seven basic landscape principles of xeriscape: planning and design, soil improvement, hydrozoning of plants, creating practical turf areas, efficient irrigation, mulching and appropriate maintenance.

General Note: The term "Xeriscape" was coined by Denver Water in 1981. The seven Xeriscape principles are included as individual GreenCO BMPs. Integration of these seven BMPs provides a comprehensive approach that can be very effective for conserving water. A common misconception of Xeriscape is that it is a plant type—this is not the case; instead, Xeriscape is a combination of multiple practices that, when properly implemented, results in landscape water conservation.

BMP Type			
Design			X
Installation			X
Maintenance/Operations			X
Green Industry Relevance			
ASLA	X	GCC	X
ALCC	X	ISA	X
CALCP	X	RMSGa	X
CNGA	X	GCSAA	X

Basic Practice Guidelines

1. Plan and design landscaping comprehensively. Start with a site inventory and analysis, where existing conditions such as drainage, exposures, soil types, views, existing plants, etc., are noted. Next, develop a list of activities ("a program") and their support facilities that need to be included in the design. Continue by diagramming possible locations for the activities from the program, while also allowing for planned traffic patterns and access or screening. Finally, use this information to develop a plan that integrates plants into the overall scheme. *(See the Landscape Design BMP for more information.)*
2. Evaluate soil and improve, if necessary. Improve soil before planting and installing the irrigation system. Soil improvement promotes better absorption of water, improved water-holding capacity and drainage of the soils. It also allows for better oxygen transfer within the root zone. *(See the Soil Amendment/Ground Preparation BMP for more information.)*



3. Create practical turf areas. Include turf areas where they provide defined functions (i.e., recreation, traffic areas, etc.). Grass is best separated from plantings of trees, shrubs, ground covers and flowers so it can be watered separately. Often, portions of turf areas can be replaced with more water-efficient ground covers and mulches. Choose the appropriate grass for the desired use. No one grass is ideal for all locations. Alternative grasses for some areas, depending on the area's purpose, may include tall fescue, buffalograss, blue grama and wheat grass. *(See the Turf BMP for more information.)*
4. Use appropriate plants and group according to their water needs (i.e., "hydrozoning"). Plants with lower water requirements such as native species adapted to Colorado's climate should be considered. However, other plants can have a place in xeriscape designs, even if they require larger amounts of water. The key is to use those plants in appropriate locations and not to interplant them with others that have very different, lower water requirements. In effect, the groupings of plants are separated into "zones" based on their water requirements, which allows them to be irrigated efficiently. *(See the Plant Selection and Placement BMP for more information.)*
5. Water efficiently with a properly designed irrigation system. Irrigate according to the condition of the plants, not on a fixed schedule. Well-planned sprinkler systems can save water when properly installed and operated. Turf areas should be watered separately from beds, shrubs and trees. Apply only as much water as the soil can absorb to avoid runoff. Trees, shrubs, flowers and ground covers can be watered more efficiently with low volume drip emitters. To promote deep rooting, water infrequently, but deeply. *(See the Irrigation Efficiency BMP for more information.)*
6. Use organic mulches to reduce surface evaporation of water and weeds. Mulched planting beds are an ideal replacement for expansive turf areas. Mulches cover and reduce temperature extremes in the soil, minimize evaporation, reduce weed growth and slow erosion. Mulches also provide landscape interest. Organic mulches are typically bark chips, wood grindings or pole peelings. Inorganic mulches include rock and various gravel products. Place mulch directly on the soil or on breathable fabric. Do not use impermeable sheet plastic beneath mulched areas. *(See the Mulching BMP for more information.)*
7. Practice appropriate landscape maintenance. Proper pruning, weeding, mowing and fertilization, plus attention to the irrigation system, are needed to maximize water savings. Regular maintenance preserves the intended beauty of the landscape and saves water and maintenance costs. Always water according to plant needs and current soil moisture conditions and not on a rigid schedule. Remember that frequent, shallow watering promotes shallow roots, which defeats the purpose of xeriscaping. *(See the Landscape Maintenance BMP for more information.)*



A well-designed and maintained Xeriscape not only conserves water, but is also aesthetically pleasing, incorporating a variety of landscaping.

Source: Denver Water.

Special Regional or Industry Considerations/Adaptations

1. Xeriscape principles are applicable industry-wide and in all locations in Colorado.

Key References

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